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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,973	06/14/2001	Ernst F. Reichwein	43299.830001.001	7474
7590	08/23/2005		EXAMINER	NGUYEN, CUONG H
HOLLAND & HART LLP 555 Seventeenth Street, Suite 3200 P.O. Box 8749 Denver, CO 80201			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/880,973	REICHWEIN ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
CUONG H. NGUYEN	3661	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 12/08/03 (the amendment).

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 18-55 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 18-55 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

1. This Office Action is the answer to the facsimile received on 12/08/2003. On 6/14/2001 claims 1-17 were canceled, and claims 18-55 have been added.

### Drawings

2. The drawings (received on 7/02/2001) are acceptable for examining purposes.

### Response

3. The examiner respectfully submits new ground(s) of rejections based on newly founded prior art, previous grounds of rejections are withdrawn; hence arguments on previous grounds of rejections are moot. The examiner regrets any delay of the case's prosecution.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

**Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.**

4. **Claims 46-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological

arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981}. However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI}. See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be

an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this **prong of the test**. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, State Street abolished the Freeman-Walter-Abele test used in *Toma*. However, State Street never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has

been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, there is no use of technology in the above claims; in order to place these claims within statutory subject matter, it is suggested that the Applicant amends these claims to more clearly define which steps are being performed by technology, such as computer processors, electronic communication networks, etc. Similar amendments could be made to the other steps in these claims in order to place them within statutory subject matter.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

**5. Claims 18-25, 28-34, 35-36, 42-47, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roizen et al. (US Pat. 5,341,291) in view of Fujimoto (US Pat. 5,339,821).**

A. As per claims 18, 20-27, 42-47, and 49-53: As best interpretation, these claims are directed to a medical history, symptom questionnaire/survey device meant, or recording steps (i.e., by keyboard inputting) to be used by a patient (lay person). It generates questions, stores answers on a storage device, and is able to print an organized report as Roizen et al's reference (see Roizen et al., the abstract, and Fig.1).

Roizen et al. disclose a printer output in Fig.2; not disclosing a graphical chart for output results.

However, Fujimoto suggests about displaying output results i.e., on a computer screen/print-out (from a hand-held/laptop/palm-top/personal computer) as a visual display such as a monitor screen; it is old and well-known that a “chart” by definition includes information arranged in tables; and organizing information for output is pretty routine. Fujimoto also teaches about using eye(s) to observe body temperature.

Roizen et al. and Fujimoto do not disclose about a touch-activated screen.

However, it is well-known that a touch-activated screen can be used for the benefit of simplifying and for easy input commands.

Roizen et al. disclose of using a numeric keyboard (see Figs. 3A-3C). Fujimoto disclose about using an alpha-numeric keyboard from a computer for inputting data (see Fujimoto, Fig.1).

However, the examiner respectfully submits that it is well-known that “a limited number of keys” described by Roizen et al.’s abstract can be implemented as an alpha-numeric for a benefit of user’s convenience in selecting a proper key.

Roizen et al. disclose a query generator that generates a menu based queries that categorize symptoms (see Roizen et al., Fig.7 ref.208).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Roizen et al., with the suggestions of Fujimoto to organize obtained data in tables or charts for the advantage of easy visualizing output results (e.g., important points would be high-lighted/making with different colors for easy recognition).

B. As per claim 19: The rationales and references for rejection of claim 18 above are incorporated.

Roizen et al. teach about recording symptoms from a human-being/animal.

C. As per claims 28-34: The rationales and references for rejection of claim 18 above are incorporated.

Roizen et al. do not disclose about a scanner.

However, the examiner respectfully submits that it is well-known for using a scanner to "read" data, including patient's name, telephone, address, and symptoms/other information.

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Roizen et al., with the suggestions of Fujimoto to organize obtained data via scanners such as an electro-optical scanning device, an optical scanning device, an electrical scanning device, a radio frequency scanning device, a magnetic scanning device, an electro-magnetic scanning device because they are various scanners that can be used in collecting data/information from a patient for the advantage of improving accuracy and getting quick information.

D. As per claims 37-39: The rationales and references for rejection of claim 18 above are incorporated.

The examiner respectfully submits that Roizen et al. teach about a recording device for medical purposes; it has a query generator to select a correct option (e.g., categorizing symptoms).

Roizen et al. do not expressly disclose that :

- a query generator categorizes symptoms based upon where symptoms occur as the product is observed by the lay person.
- a query generator categorizes symptoms based upon how often the symptoms occur as the product is observed or operated by the lay person.

- a query generator categorizes symptoms based upon when, where, and how often symptoms occur as the product is observed or operated by the lay person.
- However, the examiner respectfully submits that these detailed data are non-functional descriptive material that do not change Roizen et al.'s recording device; therefore, Roizen's device meet the physical requirement about structural component's limitations.
- It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Roizen et al., with the suggestions of Fujimoto to include particular information "based upon where/how/how often" to further detail a symptom for a benefit of proper diagnose a symptom from detailed input data.

E. As per claims 40-41, 48, and 54: The rationales and references for rejection of claim 18 above are incorporated.

Roizen et al. and Fujimoto do not disclose a query generator to generate a pictorial representation for presentation.

However, it is well-known that a pictorial representation can be a bar chart generating from MS Excel for easy comparisons.

Roizen et al. and Fujimoto do not disclose an input device allows the lay person to respond to at least one query by touching a pictorial representation on a computer screen.

However, it is well-known that a computer's touch-screen can be represented by different meaningful symbols/pictorial representation on different locations of a computer screen for a user's selection (to touch).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the idea of Roizen et al., with the suggestions of Fujimoto to include above screen's

characteristic for a benefit of easy recognition where to input/touch on a touch-activated computer screen.

F. As per claim 55: The rationales and references for rejection of claim 18 above are incorporated.

Roizen et al. disclose a product is an Internet module configured to establish Internet connections (see Roizen et al., Fig.4).

***Conclusion***

6. Pending claims 18-55 are not patentable.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759. The examiner can normally be reached on 7:30 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6759.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Serial Number: 09/880,973

Art Unit: 3661

Please provide support, with page and line numbers, for any amended or new claim in an effort to help advance prosecution; otherwise any new claim language that is introduced in an amended or new claim may be considered as new matter, especially if the Application is a Jumbo Application.

*Cuonghnguyen*

CUONG H. NGUYEN

Primary Examiner

Art Unit 3661